AMENDMENTS TO THE CLAIMS

1. (Original) A pressure sensor apparatus comprising:

a sensor element in the form of a gauge resistor arranged to be present in a medium, the pressure of which is to be detected, for detecting the pressure of the medium;

a control element for controlling an electric signal from said sensor element;

a power supply element for controlling an input from a power supply and a signal from said control element thereby to generate an output;

a lead frame having said control element and said power supply element mounted thereon and serving as an electrical conduction path; and

a resin body that is formed by integrating said control element, said power supply element and said lead frame with one another;

wherein any one of said sensor element, said control element and said power supply element is arranged at one side surface of said lead frame, with the remaining two being arranged on the other side surface of said lead frame.

2. (Original) The pressure sensor apparatus as set forth in claim 1, wherein said sensor element is arranged on a line perpendicular to a surface of said lead frame at a side of either said control element or said power supply element.

3. (Original) The pressure sensor apparatus as set forth in claim 1 or claim 2, wherein said lead frame comprises a circuit board having conductive patterns formed on opposite side surfaces thereof, and said control element is electrically connected with one of said conductive patterns on one side surface of said circuit board, with said power supply element being electrically connected with the other of said conductive patterns on the other side surface of said circuit board.

4. (Original) The pressure sensor apparatus as set forth in claim 3, wherein said circuit board comprises a flexible circuit board.

5. (Original) A pressure sensor apparatus comprising:

a sensor element in the form of a gauge resistor arranged to be present in a medium, the pressure of which is to be detected, for detecting the pressure of the medium;

a control element for controlling an electric signal from said sensor element;

a power supply element for controlling an input from a power supply and a signal from said control element thereby to generate an output;

a lead frame having said control element and said power supply element mounted thereon and serving as an electrical conduction path; and

a resin body that is formed by integrating said control element, said power supply element and said lead frame with one another;

wherein said lead frame has an exposure portion at which a portion thereof between said sensor element and said control element and between said sensor element and said power supply element is exposed outside, and said exposure portion is bent into a U-shaped configuration so that said sensor element is arranged to overlap with said control element and said power supply element.

6. (Currently Amended) The pressure sensor apparatus as set forth in any one of claims 1, 2, or ~~through~~ 5, wherein said resin body is formed by integrating said control element, said power supply element and said lead frame with one another by means of insert molding.

7. (Original) A pressure sensor apparatus comprising:

a sensor element in the form of a gauge resistor arranged to be present in a medium, the pressure of which is to be detected, for detecting the pressure of the medium;

a control element for controlling an electric signal from said sensor element;

a power supply element for controlling an input from a power supply and a signal from said control element thereby to generate an output;

a terminal having said control element and said power supply element mounted thereon for outputting a signal from said power supply element to the outside; and

a resin body that is formed by integrating said control element, said power supply element and said terminal with one another.

8. (Original) The pressure sensor apparatus as set forth in claim 7, wherein said resin body is formed by integrating said control element, said power supply element and said terminal with one another by means of insert molding.

9. (New) The pressure sensor apparatus as set forth in claim 3, wherein said resin body is formed by integrating said control element, said power supply element and said lead frame with one another by means of insert molding.

10. (New) The pressure sensor apparatus as set forth in claim 4, wherein said resin body is formed by integrating said control element, said power supply element and said lead frame with one another by means of insert molding.

11. (New) The pressure sensor apparatus as set forth in claim 7, wherein there is no lead frame.

12. (New) The pressure sensor apparatus as set forth in claim 11, wherein said power supply element and said control element are directly mounted on said terminal.

13. (New) The pressure sensor apparatus as set forth in claim 7, wherein said power supply element and said control element are directly mounted on said terminal.

14. (New) The pressure sensor apparatus as set forth in claim 13, wherein said terminal is of a one-piece construction and extends from a point of connection with either one of said power supply element and said control element to an outside of said resin body.